Reference = ABLIKIM 15M; PR D91 112008
Verifier code = BES3

Normally we send all verifications for one experiment to one person, usually the spokesperson or data-analysis co-ordinator, who then distributes them to the appropriate people. Please tell us if we should send the verifications for your experiment to someone else.

PLEASE READ NOW

PLEASE REPLY WITHIN ONE WEEK

Xiao-Rui Lyu

EMAIL: xiaorui@ucas.ac.cn

July 21, 2016

Dear Colleague,

(1) Please check the results of your experiment carefully. They are marked.

(2) Please reply within one week.

(3) Please reply even if everything is correct.

(4) IMPORTANT!! Please tell WHICH papers you are verifying. We have lots of requests out.

(5) Feel free to make comments on our treatment of any of the results (not just yours) you see.

Thank you for helping us make the Review accurate and useful.

Sincerely,

Simon Eidelman
BINP, Budker Inst. of Nuclear Physics
Prospekt Lavrent'eva 11
RU-630090 Novosibirsk
Russian Federation

EMAIL: simon.eidelman@cern.ch

LIGHT UNFLAVORED MESONS ($S = C = B = 0$)

NODE=MXXX005

For $I = 1$ (π, b, ρ, a): $u\overline{d}$, $(u\overline{u}-d\overline{d})/\sqrt{2}$, $d\overline{u}$;
for $I = 0$ (η, η', h, h', ω, ϕ, f, f'): $c_1(u\overline{u} + d\overline{d}) + c_2(s\overline{s})$

NODE=MXXX005

NODE=M109

$h_1(1380)$

$I^G(J^{PC}) = ?^-(1^{+-})$

OMITTED FROM SUMMARY TABLE

Seen in partial-wave analysis of the $K\overline{K}\pi$ system. Needs confirmation.

NODE=M109

$h_1(1380)$ MASS

NODE=M109M

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
1407±12 OUR AVERAGE	Error includes scale factor of 1.5.			
YOUR DATA 1412± 4±8	ABLIKIM	15M	BES3	$\psi(2S) \rightarrow \gamma\chi_{c1,2} \rightarrow \gamma K^*\overline{K}$
1440±60	ABELE	97H	CBAR	$\overline{p}p \rightarrow K^0_L K^0_S \pi^0\pi^0$
1380±20	ASTON	88C	LASS	11 $K^- p \rightarrow K^0_S K^\pm \pi^\mp \Lambda$

NODE=M109M

NODE=M109M

$h_1(1380)$ WIDTH

NODE=M109W

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
89±23 OUR AVERAGE				
YOUR DATA 84±12±40	ABLIKIM	15M	BES3	$\psi(2S) \rightarrow \gamma\chi_{c1,2} \rightarrow \gamma K^*\overline{K}$
170±80	ABELE	97H	CBAR	$\overline{p}p \rightarrow K^0_L K^0_S \pi^0\pi^0$
80±30	ASTON	88C	LASS	11 $K^- p \rightarrow K^0_S K^\pm \pi^\mp \Lambda$

NODE=M109W

NODE=M109W

$h_1(1380)$ REFERENCES

NODE=M109

YOUR PAPER ABLIKIM	15M	PR D91 112008	M. Ablikim *et al.*	(BES III Collab.)	REFID=56778
ABELE	97H	PL B415 280	A. Abele *et al.*	(Crystal Barrel Collab.)	REFID=45765
ASTON	88C	PL B201 573	D. Aston *et al.*	(SLAC, NAGO, CINC, INUS)	REFID=40282

$c\overline{c}$ MESONS

NODE=MXXX025

NODE=M056

$\chi_{c0}(1P)$

$I^G(J^{PC}) = 0^+(0^{++})$

$\chi_{c0}(1P)$ BRANCHING RATIOS

NODE=M056220

HADRONIC DECAYS

NODE=M056305

$\Gamma(\overline{K}^0 K^+\pi^-\phi + \text{c.c.})/\Gamma_{\text{total}}$ **Γ_{52}/Γ**

NODE=M056R90
NODE=M056R90

VALUE (units 10^{-3})	*DOCUMENT ID*		*TECN*	*COMMENT*
YOUR DATA **3.68±0.30±0.50**	ABLIKIM	15M	BES3	$\psi(2S) \rightarrow \gamma\chi_{c0}$

$\Gamma(K^+K^-\pi^0\phi)/\Gamma_{\text{total}}$ **Γ_{53}/Γ**

NODE=M056R91
NODE=M056R91

VALUE (units 10^{-3})	*DOCUMENT ID*		*TECN*	*COMMENT*
YOUR DATA **1.90±0.14±0.32**	ABLIKIM	15M	BES3	$\psi(2S) \rightarrow \gamma\chi_{c0}$

$\chi_{c0}(1P)$ REFERENCES

NODE=M056

YOUR PAPER ABLIKIM 15M PR D91 112008 M. Ablikim *et al.* (BES III Collab.) REFID=56778

NODE=M055

$\chi_{c1}(1P)$

$I^G(J^{PC}) = 0^+(1^{++})$

See the Review on "$\psi(2S)$ and χ_c branching ratios" before the $\chi_{c0}(1P)$ Listings.

NODE=M055

$\chi_{c1}(1P)$ BRANCHING RATIOS

NODE=M055225

HADRONIC DECAYS

NODE=M055305

$\Gamma(\overline{K}^0 K^+\pi^-\phi + \text{c.c.})/\Gamma_{\text{total}}$ **Γ_{38}/Γ**

NODE=M055R69
NODE=M055R69

VALUE (units 10^{-3})	*DOCUMENT ID*	*TECN*	*COMMENT*
YOUR DATA **3.27±0.28±0.46**	ABLIKIM 15M	BES3	$\psi(2S) \to \gamma\chi_{c1}$

$\Gamma(K^+K^-\pi^0\phi)/\Gamma_{\text{total}}$ **Γ_{39}/Γ**

NODE=M055R70
NODE=M055R70

VALUE (units 10^{-3})	*DOCUMENT ID*	*TECN*	*COMMENT*
YOUR DATA **1.62±0.12±0.28**	ABLIKIM 15M	BES3	$\psi(2S) \to \gamma\chi_{c1}$

$\chi_{c1}(1P)$ REFERENCES

NODE=M055

YOUR PAPER ABLIKIM 15M PR D91 112008 M. Ablikim *et al.* (BES III Collab.) REFID=56778

NODE=M057

$\chi_{c2}(1P)$

$I^G(J^{PC}) = 0^+(2^{++})$

See the Review on "$\psi(2S)$ and χ_c branching ratios" before the $\chi_{c0}(1P)$ Listings.

NODE=M057

$\chi_{c2}(1P)$ BRANCHING RATIOS

NODE=M057225

HADRONIC DECAYS

NODE=M057305

$\Gamma(\overline{K}^0 K^+\pi^-\phi + \text{c.c.})/\Gamma_{\text{total}}$ **Γ_{41}/Γ**

NODE=M057R79
NODE=M057R79

VALUE (units 10^{-3})	*DOCUMENT ID*	*TECN*	*COMMENT*
YOUR DATA **4.83±0.32±0.66**	ABLIKIM 15M	BES3	$\psi(2S) \to \gamma\chi_{c2}$

$\Gamma(K^+K^-\pi^0\phi)/\Gamma_{\text{total}}$ **Γ_{42}/Γ**

NODE=M057R80
NODE=M057R80

VALUE (units 10^{-3})	*DOCUMENT ID*	*TECN*	*COMMENT*
YOUR DATA **2.74±0.16±0.44**	ABLIKIM 15M	BES3	$\psi(2S) \to \gamma\chi_{c2}$

$\chi_{c2}(1P)$ REFERENCES

NODE=M057

YOUR PAPER ABLIKIM 15M PR D91 112008 M. Ablikim *et al.* (BES III Collab.) REFID=56778